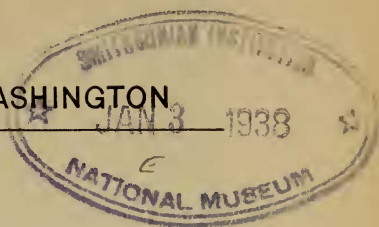


PROCEEDINGS
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NEW RACES OF MYADESTES, SPIZELLA AND
TURDUS FROM NORTHWESTERN MEXICO.

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Among the specimens of birds from Sinaloa, collected by Chester C. Lamb, are appearing successively, new forms which must be credited to his indefatigable energy. They are described below.

My acknowledgments are gratefully made to Mr. George Willett and the Los Angeles Museum, to Dr. Louis B. Bishop, to Mr. James L. Peters and the Museum of Comparative Zoology, to Dr. Herbert Friedmann and the Smithsonian Institution, and to Dr. Oberholser and the Biological Survey, for the loan of extremely important comparative material for all three of the forms described below.

***Myadestes townsendi calophonus*, subsp. nov.**

DUSKY SOLITAIRE.

Type.—Female adult in breeding condition, nesting; number 18452, collection of Robert T. Moore; upper end of Trogon Valley, within 1000 feet of summit of Mt. Mohinora, southwest Chihuahua, Mexico; May 18, 1937; altitude 10,400 feet; collected by Robert T. Moore.

Subspecific characters.—Differs from *Myadestes townsendi townsendi* (Audubon) in being darker above and below; pileum darker, not uniform with back; Ochraceous-buff¹ band across surface of remiges richer in color both above and below; the underparts uniformly dark in coloration, not paler on chin, throat and abdomen; throat and breast tinged with olive, at least in summer plumage.

Our fresh series of seventeen specimens, chiefly males, from three localities in southwestern Chihuahua and Durango contrast sharply with a series of *M. t. townsendi* from near the type locality in Oregon and from Idaho. Colorado and New Mexico individuals are intermediate in coloration.

¹ Names of colors in this paper, when capitalized, are taken from Ridgway's "Color Standards and Color Nomenclature," 1912.

tion; Arizona birds nearer *townsendi*. An M. C. Z. ♂ (No. 89786 Mar. 20) from Newcastle, Col., is so much darker than any other winter specimens that it may represent melanism. Un-worn May and much-worn July-August *calophonus* show the pileum much darker than *townsendi* of same stage of wear. The auricular region tends to be darker and sharply defined. The May Type of *calophonus*, when compared with two May individuals from Idaho and Montana in the Bishop Collection, also reveals all the characters mentioned above, an even greater contrast in coloration, and like many of the males, a distinct blackish spot in front of the eye as contrasted with the gray of *townsendi*.

Range.—Breeds from the lower border of the Canadian Life Zone² on Mt. Mohinora, southwestern Chihuahua, down through the Transition Zone to about 6000 feet and south to Muertocito, Durango, and probably as far north as Pinos Altos, Chihuahua, where Frazar took six specimens in June and July.

Specimens examined.—*Calophonus*, S. W. Chihuahua, 4 ♂ 1 ♀ (Type) east side of Mt. Mohinora (above 10,000 feet), 10 ♂ Laguna Juanota, 4 ♂ 1 ♀ 1 juv. Pinos Altos, 1 ♀ 1 (?) N. Chihuahua; Durango, 2 ♂ Muertocito, 1 ♀ Cienago de las Vacas. *Townsendi*, Oregon, 1 ♀ Columbia River-Astoria (Type), 1 ♂ 1 ♀ Prineville, 1 ♂ Ironsides, 1 ♂ Ft. Klamath, 1(?) Crooked River; Washington, 1 ♂ Puyallup; Brit. Col., 2 ♂ 1 ♀ Chilliwack, 1 ♂ Revelstoke; California, 1 ♂ Modoc County, 1 ♀ Stony Ford; 1 ♀ Placerito Cañon, 1 ♂ Nicasio, 1 ♀ Kern Riv. Canyon, 1 ♂ 1 ♀ Vade, 2 ♂ 1 ♀ Mt. Tallac, 1 ♂ Snow Mt., 1 ♀ Fyffe, 1 ♂ Silver Creek, 1 ♂ Placerville, 4 ♂ 2 ♀ Echo, 1(?) Rand, 1(?) Volcano Mines, 1(?) Big Trees, 1(?) Calaveras Riv., 1(?) Ft. Crook; Idaho, 3 ♂ 2 ♀ Coeur d'Alene; Montana, 1 ♀ Miles City; Wyoming, 1 ♂ Bear Lodge; Colorado, 5 ♂ 6 ♀ Colorado Springs, 2 ♂ 1 ♀ S. Fork San Miguel, 1 ♂ 1 ♀ Buena Vista Co., 2 ♂ Ouzel Lake, 1 ♂ 1 ♀ Cochitop Pass, 1 ♂ 1 ♀ Newcastle, 2 ♂ Placerville, 1 ♀ Park Co., 1 ♀ Larimer Co., 1(?) Elk Creek, 3 "Colorado"; Arizona, 2 ♀ Chiricahua Mts., 1 ♀ Huachuca Mts., 1 ♀ Santa Rita Mts., 1 ♂ Pinal Co., 3 ♀ Palmerlee, 3 ♀ Mineral Creek, 4 ♂ 3 ♀ Ft. Verde, 2 ♂ 1 ♀ Catalina Mills, 1 ♂ 1 ♀ Catalina Mts., 2 ♂ Cataract Creek, 1(?) Whipple Barracks; New Mexico, 1 ♂ Santa Fe, 1 ♀ Ft. Bayard, 1 ♂ Grant Co., 1 ♀ Silver City, 1(?) Cantonment Beywyn; Texas 1 ♂ Grancano, 1 ♀ Mecas.

Remarks.—Ridgway (Birds of N. & M. America, Part IV, p. 164, footnote) calls attention to the difference in coloration of Mexican specimens as compared with those in the United States. Apparently he had few, if any, taken in the breeding months, and the small size of his series seems to have thwarted the description of a new form. All of our five individuals from Mt. Mohinora are breeding birds, taken the latter part of May (the Type with large eggs in the oviduct); the two June males from Muertocito, Durango, have the breeding organs greatly enlarged and a July male and female from Laguna Juanota are also breeding. From the condition of the sex organs of our earliest taken males, I am doubtful if the bird breeds in the month of April,

² By a lapsus the term, "Temperate Zone," was used when referring to Mt. Mohinora, in the author's paper (Proc. Biol. Soc. Wash., vol. 50, July 23, 1937, p. 100).

at least at high altitudes. At our camp at 10,000 feet on Mt. Mohinora at the breeding level of the Solitaire, an inch and a half of snow fell on May 11th. The late March bird reported by Miller from Cienega de las Vacas, Durango, the April bird from Coahuila mentioned by Ridgway (Birds of N. & M. America, Part IV, p. 164) and the Jalisco bird, cited by Salvin & Godman (Ibis, 1889, p. 381) may have been migrants. The Type of *townsendi* is so badly faded that the true characters can be ascertained only from fresher specimens.

***Spizella passerina atremaeus*, subsp. nov.**

BLACK-STRIPED CHIPPING SPARROW.

Type.—Adult male in full breeding condition; number 18,596, collection of Robert T. Moore; Los Frailes, Chihuahua, Mexico, near Durango-Chihuahua state line, 10 miles east of Sinaloa state line; June 23, 1937; collected by Chester C. Lamb.

Subspecific characters.—Nearest to *Spizella passerina arizonae* Coues, but breeding plumage darker above, the dark streaks blacker and much wider, rectrices and lesser wing coverts blacker; breast darker gray, sharply contrasted with the white throat. Differs from the Type of *Spizella passerina mexicana* Nelson in having buffy chestnut borders to feathers of the back; pale buff instead of bright cinnamon; breast decidedly grayer, without buff, and lower underparts much less buffy.

In the winter plumage the upper parts of the northern races differ in much the same way, but the gray of the breast, throat and flanks of *atremaeus* are considerably overlaid with buffy, being closer in this character to *mexicana* than to *arizonae*. The young of the new form with streaked breasts are distinctly darker above, especially blacker on the head and slightly more heavily streaked below. An August young bird from Ojito, Durango, is much more lightly and faintly streaked below.

Range.—Breeds in the Transition Zone of the high mountains of eastern Sinaloa, northwestern Durango and extreme southwestern Chihuahua from an altitude of 5400 feet to about 8000 feet. It seems to winter in the same region, at least as high as 6400 feet at Babizos, Sinaloa.

The northern limit of the range seems to reach about latitude 26° in northeastern Sinaloa at Surata and Babizos and extends southward at least to Rancho Batel in southeastern Sinaloa near latitude 23°. The birds of extreme northeastern Sinaloa and southeastern Sonora, from Santa Gertrudis to Guirocoba, are intergrades with *S. p. arizonae* and rather closer to *arizonae*. The Frazer-collected series from Pinos Altos, Chihuahua, is closer to *arizonae*, but slightly buffier below. Taken in the same months, they are more uniform below and streaking narrower above than *atremaeus*. The birds of Central Mexico are extremely buffy below, but their status can not be determined at present. A large series from Laguna Juanota, southern Chihuahua, and Ojito, extreme northern Durango, strongly resemble *atremaeus*, although showing individual variability. Many fully adult July birds from this region have much lighter pileums than any of the three races mentioned above. I have not seen the series from central and northern Durango which Miller reported to "agree in

coloration with Arizona birds," so I do not know if these resemble specimens from Laguna Juanota.

Specimens examined.—*Arizonae*, Arizona, 1 (?) Ft. Whipple, 1 ♂ 1 ♀ Sunnyside, 2 (?) Presnal, 1 ♂ 1 ♀ Fort Lowell, 1 ♂ Paradise, 2 ♂ Ft. Huachica, 1 ♂ Chiracahua Mts., 2 ♂ Palmerlee, 3 ♂ 1 ♀ Russelville, many immatures; New Mexico 1 ♂ Reserve, 1 ♂ Silver City, 1 ♂ Ancho; California, 1 juv. Humbolt Co., 1 ♂ San Antonio Canyon; Idaho, 2 ♀ juv. Coeur d'Alene; Oregon, 1 juv. ♂ Rogue River, 145 specs. in M. C. Z. from British Columbia to Texas; S. E. Sonora, 4 ♂ 1 ♀ Guirocoba, 1 ♂ Camoa; 1 ♂ Guirojaqui; Sinaloa, 3 ♂ 5 ♀ Huassa, 1 ♂ 4 ♀ El Orito, 1 ♂ Santa Gertrudis; Chihuahua, 9 ♂ 8 ♀ "Chihuahua," 2 ♀ Mina Abundancia, 1 ♂ Durazno, 1 ♂ Pachaco, 4 ♂ 4 ♀ Pinos Altos, 1 ♂ Vasagota. *Atremaeus*, Sinaloa, 6 ♂ 1 ♀ Los Frailes, 5 ♂ 3 juv. ♂ Surutato, 3 ♂ 2 ♀ 1 juv. ♀ Babizos, 5 ♂ 2 ♀ Rancho Batel. Probably intergrades: Chihuahua, 6 ♂ 4 ♀ Laguna Juanota; Durango, 6 ♂ 5 ♂ Ojito. *Mexicana*, Chiapas, 1 San Cristobal (type); Guatemala 1 ♂ Momostenango; Daraca, 3 ♂ Chivela, Guerrero, 1 ♂ 3 ♀ Tazo, 1 ♂ Tehuantepec, Morelos, 2 ♂ 1 ♀ Ocotetpec; Mexico, 3 ♀ 1 ♂ Temascaltepec, 1 ♂ near Mexico City, 1 ♂ Desierto de Leones, 2 ♂ Contreras; Michoacan, 2 ♀ Uruapan; "Aguas calientes" 1 ♂ 1 ♀.

Remarks.—The new race is clearly not an intergrade between *arizonae* and *mexicana*, because its upper parts are very much blacker than either. Adequate series of all the races in exactly comparable material, both for the breeding birds of each month, showing the same amount of wear, and for specimens in winter plumage must be assembled for satisfactory comparison. The characters of the upper parts can be judged better in June and July breeding specimens, when the softer margins of the feathers do not obscure the black streaking.

In this new race we have again, as in so many of the mountain birds of Sinaloa, a form that reaches its maximum characters in the heavy rainfall area of the western slope of the Sierra Madre. It seems increasingly evident that the meteorological conditions affect many species.

***Turdus assimilis calliphthongus*, subsp. nov.**

PALLID MEXICAN THRUSH.

Type.—Male adult in breeding plumage; number 8205, collection of Robert T. Moore; Baromicon, Sonora, Mexico, near Sonora-Chihuahua boundary line, east of Guirocoba, Sonora; May 16, 1933; altitude about 3000 feet; collected by Robert T. Moore.

Subspecific characters.—Nearest to *T. a. renominatus* Miller & Griscom, of southeast Sinaloa, but birds of breeding season with breast, sides and flanks Drab, instead of Buffy Brown or Isabella Color; upper parts Drab, but with a very faint olive tinge instead of light Brownish Olive to Sepia; axillars and under wing coverts Pinkish Buff instead of Cinnamon-Buff; white of abdomen more extensive; light area immediately below streaks on throat whiter and more extensive.

The winter plumage of both races shows the same differences in characters, but is proportionately darker.

Range.—Barrancas of the western slope of the main Sierra Madre of southeastern Sonora and extreme northeastern Sinaloa, breeding from approximately 2500 to 5500 feet.

Two males and one female secured by Mr. Lamb at San Jose, Chihuahua, 20 miles northeast of Choix, Sinaloa, seem to be true *calliphthongus*, but a series of nine specimens, taken by Mr. Lamb at Babizoa, Sinaloa, and an adult male and one immature female from San Feliz, Chihuahua, both localities approximately 75 miles due south of San Jose, are intergrades between *calliphthongus* and *renominatus*, most of the specimens being much closer to the latter.

Specimens examined.—*Calliphthongus*, S. E. Sonora, 3 ♂ 1 ♀ Baromicon, 1 ♀ San Rafael, 2 ♀ "Hacienda de San Rafael," 1 ♂ 1 ♀ Guirojaqui; N. E. Sinaloa, 1 ♀ Rosario, 1 ♂ 1 ♀ Huassa, 1 ♂ San Francisco Canyon; Chihuahua, 2 ♂ San Jose. *Renominatus*, Sinaloa, 1 ♂ 3 ♀ Rancho Santa Barbara, 20 miles northeast of Rosario³, 1 ♀ Palos Verdes Mine near Santa Lucia, 3 ♂ 4 ♀ Rancho Picacho, 15 miles east of Cacalotan, 6 ♂ 1 ♀ 1 juv. ♀ Babizos; Chihuahua, 1 ad. ♂ 1 im. ♀ San Feliz, near Chihuahua-Sinaloa state line; Nayarit, 1 ♀ Rio Los Canas, in extreme northwestern Nayarit, 1 ♀ Tepic; Colima, 1 ♂ Plains of Colima; Guerrero, 1 ♂, 2 ♀ Chilpancingo, 5 ♂ 1 ♀ Omilteme; Mexico, 4 ♂ Temascaltepec. *Assimilis*, Vera Cruz, 1 ♂ 4 ♀ 2 (?) Orizaba, 1 ♂ 1 ♀ 2 (?) Perote Mts., Jalapa, 1 ♂ Tlacotalpan.

Remarks.—The author's notes made on Sept. 19, 1933, in the Museum of Comparative Zoology, Cambridge, indicated his conviction that the birds of southeastern Sonora constitute a new race, the palest of all the races of *assimilis*. Publication was held in abeyance until a thoroughly adequate topotypical series could be secured of *renominatus* from the mountains of southeastern Sinaloa. The delay proved to be wise for in the year 1934 three series of fresh specimens were taken, not only of *calliphthongus*, but also of *renominatus* from close to the type locality in southeastern Sinaloa, and of specimens which were then presumed to be true *assimilis*, from Temascaltepec, state of Mexico. In a species, which is noted for its post-mortem change, it was imperatively necessary to compare series taken in the same year and months from these three widely separated localities. Apparently no student has had this opportunity before. Furthermore, we have both winter and summer birds taken in the same year. Comparison proved that June and July birds from Temascaltepec are almost identical both in coloration and size with June, July and August birds of *renominatus* from southern and central Sinaloa, but the birds of southeastern Sonora represent a much paler extreme. I am inclined to believe that the range of *renominatus* extends at least to the western portion of the state of Mexico. Juveniles of the two races at the same stage of development are almost identical. It is futile to attempt to compare the fresh breeding birds from Temascaltepec with the ancient specimens from Vera Cruz, nor do I believe it possible to determine the exact relationship unless new specimens are obtained in the same year and the same months.

³ There are two places called Rosario, one in N. E. Sinaloa and one in southern Sinaloa.